Charlie – Maybe the crown is wrong. Perhaps it is really Check* who has preferred theories re definitions of degrading/dehumanizing pornography. This article would suggest that. Hope this is more helpful.

Meg

*as opposed to Malamuth

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PORNOGRAPHY: Research Advances and Policy Considerations

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Reported Proclivity for Coercive Sex Following Repeated Exposure to Sexually Violent Pornography, Nonviolent Dehumanizing Pornography, and Erotica

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This chapter details a study that is one of a series of studies designed to examine the validity of the hypothesis that sexually explicit materials may be divided into the following three types: (a) sexually violent pornography; (b) nonviolent dehumanizing pornography, and (c) nonviolent erotica. The basic assumption of this research program is that the effects of exposure to sexually explicit materials are very much dependent on the *social content* of the material in question, rather than the fact that sexual behaviors are portrayed. The impetus for this thesis can be seen from an historical overview of the research on pornography effects.

PAST RESEARCH: VIOLENT VERSUS NONVIOLENT PORNOGRAPHY

In 1970 the U.S. Commission on Obscenity and Pornography essentially gave *nonviolent* pornography a "clean bill of health," concluding that such materials did not have any demonstrated effects of a damaging personal or social nature. However, research conducted over the past several years has suggested that (a) *sexual violence* in pornography is on the increase (e.g., Check, 1984; Malamuth &

Spinner, 1980; Smith, 1976), and (b) such violent sexual materials have certain antisocial effects. Specifically, portrayals that, for example show women enjoying rape and other forms of sexual violence can lead to:

1. Increased acceptance of rape myths in both men and women (Check & Malamuth, 1982; Malamuth & Check, 1985).
2. Increased acceptance of violence against women (Malamuth & Check, 1981).
3. Increased rape fantasies (Malamuth, 1981a).
4. Increased aggressive behavior toward women in the laboratory setting (e.g., Donnerstein & Berkowitz, 1981).
5. Decreased future perceptions of rape victim suffering (Malamuth & Check, 1980; Linz, Donnerstein, & Penrod, 1984).
6. A future desensitization to sexual violence (Linz et al., 1984).
7. Increased reported willingness to rape (Donnerstein, 1984).

Thus, there is a good deal of past research to indicate that it is important to distinguish sexually violent pornography from nonviolent forms of sexually explicit materials.

NEW RESEARCH ON THE EFFECTS OF NONVIOLENT PORNOGRAPHY

Until quite recently, pornography effects theorists had, to a large extent, accepted the thesis that the effects of sexually violent materials were very different from the effects of nonviolent sexual images, and that nonviolent sexual materials had minimal if any antisocial effects (e.g., Check & Malamuth, 1986; Donnerstein, 1984; Linz, 1985; Malamuth, 1984). However, a growing number of writers (e.g., Lederer, 1980) have been arguing for some time that there are certain types of nonviolent pornography which do not necessarily have to contain clear-cut sexual violence (e.g., rape) in order to have antisocial effects (see e.g., Lederer, 1980). These writers suggest that sexual depictions which degrade, debase, and dehumanize women may lead to calloused sexual attitudes even if they do not contain explicit depictions of violent behavior. Zillmann and Bryant (1984) suggested that such an effect would result from "the characteristic portrayal of women in pornography as socially nondiscriminating, as hysterically euphoric in response to just about any sexual or pseudosexual stimulation, and as eager to accommodate seemingly any and every sexual request" (p. 134).

Note that Zillmann and Bryant's description is highly similar to Kelman's (1973) and Zimbardo's (1969) description of a dehumanized person, and that such dehumanization of victims is an important disinhibitor of cruelty toward others (Bandura, Underwood, & Fromson, 1975). Similarly, Brownmiller (1975) argues that women in pornography are

> stripped, exposed, and contorted for the purpose of ridicule to bolster that "masculine esteem" which gets its kick and sense of power from viewing females as anonymous, panting playthings, adult toys, dehumanized objects to be used, abused, broken and discarded. This, of course, is also the philosophy of rape. (pp. 442–443)

This new thesis that certain types of *nonviolent* pornography can have antisocial effects has recently received empirical support from a repeated-exposure study by Zillmann and Bryant (1982, 1984). These investigators repeatedly exposed men and women to films of what they termed "standard fare" pornography, over a 6-week period. The authors were careful to note that none of their films entailed "coercion or the deliberate infliction or reception of pain" (Zillmann & Bryant, 1982, p. 13). The results revealed that these nonviolent materials led to (a) lowered recommended sentences for rape, (b) decreased support for the women's liberation movement, and (c) increased sexual callousness toward women (this latter variable being assessed for males only). Calling for further longitudinal research, Zillmann and Bryant (1984) suggested that the single-exposure paradigms used in previous research may have been insensitive to the lasting effects of repeated exposure to nonviolent pornography of the type used in their study.

DO EROTICA EXIST?

The Zillmann and Bryant (1982, 1984) studies provide empirical support for antisocial effects of the type of pornography that the authors describe as nonviolent but nonetheless abusive and dehumanizing in content. However, there is also a growing awareness amongst many groups of at least the potential existence of more prosocially oriented forms of sexually explicit materials, or what we have referred to previously as *erotica*. Several theorists (Check, 1985; Lederer, 1980; Steinem, 1980) have suggested that the key element of such "erotic" materials is that they present a more humanized portrayal of human sexuality, wherein, or example, "there is usually a sensuality and touch and warmth, an acceptance

of bodies and nerve endings. . . . a spontaneous sense of people who are there because they want to be, out of shared pleasure" (Steinem, 1980, p. 37). Note the similarity between Steinem's description of erotica and Mosher's (1971a) description of materials that he found led to a *decrease* in men's sexual callousness. Mosher stated that his materials had "more affection than is typical of much pornography. In my opinion, these particular films would have more appeal to the sexually experienced, uninhibited adult of both sexes than would most pornography, which is oriented toward a male audience and more 'kinky' sex" (p. 258).

Although these distinctions would appear to make sense at the theoretical level, there has been almost no research to date directed at actually comparing violent pornography with the two "types" of nonviolent pornography described here. Given the important theoretical, legal, and policy implications of such a distinction, the present study was conducted as a first step in a program of research designed to separate out these differing types of materials.

RESEARCH METHODOLOGY

Overview of the Design

The major purpose of this study was to compare the effects of violent pornography with the effects of two forms of nonviolent materials: (a) dehumanizing or degrading pornography, and (b) erotica or prosocially oriented, humanized, realistic depictions of human sexuality. Over the course of a 1- to 2-week period, subjects in the three videotape exposure conditions viewed a total of three videotapes of sexually explicit stimulus materials during three separate evening sessions, and then returned for a fourth session to complete a questionnaire containing the various dependent measures. Subjects in the no exposure condition simply completed the questionnaire, but were then given a sexually explicit videotape to evaluate (for use in other research). The primary independent variables were student status (student versus nonstudent) and videotape exposure (sexually violent material versus nonviolent dehumanizing material versus nonviolent erotic material versus no exposure). Two other potentially important secondary variables were included, namely psychoticism and reported history of pornography consumption. (See later for further details.)

The major dependent variables were sexually aggressive attitudes, reported likelihood of rape/forced sex, sexual callousness, and sexually aggressive behavior.

Subjects

Subjects were 117 male college students and 319 male nonstudent Toronto residents, who were paid for their participation. Participants were randomly assigned to the various experimental conditions.

Materials

Stimulus Materials

For each exposure condition, three videotapes were constructed, each of which contained three or four excerpted 5–10 minute sexually explicit scenes or episodes taken from either commercially produced entertainment videos or from sex educations films. (We used excerpts because we simply could not find feature-length videos which contained exclusively one type of material. In fact, many of the videos we screened contained both nonviolent, dehumanizing scenes and nonviolent, erotica scenes in the same videotape, and some even contained sexually violent scenes as well.) All videotapes were approximately 30 minutes in length, and portrayed sexual acts usually leading up to intercourse between a man and a woman. There were no scenes in any of the tapes involving sex acts with animals, no group sex scenes, no scenes containing bloodletting or extreme acts of violence against women (murder, mayhem, etc.), no "theme bondage" scenes, and no scenes involving children.

Each of the three experimental videotape exposure groups saw a different set of videotapes. The first set of tapes contained sexual violence (primarily rape) that was portrayed as having favorable consequences, usually involving the suggestion that the woman enjoyed the experience (e.g., she responded with sexual arousal, was portrayed as sadomasochistic, etc.). The second set of tapes contained portrayals of sexual interactions in which the woman was portrayed as hysterically responsive to male sexual demands, was verbally abused, dominated, and degraded, and in general treated as a plaything with no human qualities other than her physical attributes (i.e., she was portrayed in a nonviolent but dehumanized fashion). Again, the woman was usually portrayed as enjoying whatever abuse she experienced. The third set of tapes contained erotica, and consisted of scenes of mutually consenting,

affectionately oriented sexual interactions, without any violent or dehumanizing content.

Prescreening Questionnaire

Eysenck's (1978) psychoticism scale served as the major prescreening measure, in addition to serving as one of the predictor variables in the experiment proper.[1] Cutoff scores of 10 for psychoticism and 18 years for age were used to eliminate subjects who were too psychotic or too young to be allowed to participate. (As it turned out, all subjects were over 18 years of age and scored less than 10 on the psychoticism scale.) Subjects were also asked to indicate on the prescreening questionnaire how frequently they viewed sexually explicit videos or films (per month), and this measure served as the measure of habitual pornography consumption. As detailed further later, the psychoticism and pornography consumption variables were included in order to examine how they might mediate the effects of exposure to the videotapes that were the main focus of this study.

Evaluations and Perceptions of the Videotapes

At each of the three videotape-exposure sessions, subjects were asked to evaluate the videotape on a number of dimensions, for instance, how sexually arousing, exciting, stimulating, boring, educational, realistic, obscene, offensive, aggressive, degrading, and affectionate they found the videotape to be, for use in other research (Check & Guloien, in preparation). Subjects were also asked to indicate their perceptions of the women and the men in the videos, (i.e., perceptions of willingness, pleasure, affection, and pain, as well as actor/actress liking ratings), again for use in other research.

Affective Reactions

At each of the videotape exposure sessions, subjects were asked to complete the Multiple Affect Adjective Check List (MAACL; Zuckerman, Lubin, Vogel, & Valerius, 1964), just before and just after viewing the videotape. These data were for use in other research (Check & Guloien, in preparation).

[1] Note that this measure was used because, as Eysenck (1978) made abundantly clear, his scale purports to reflect levels of psychoticism that extend into the normal, nonpsychiatric population.

Postexposure (Dependent) Variables

A number of dependent measures were used on the postexposure questionnaire (administered at the fourth session) in order to assess the effects of exposure to the videotapes. These included measures of sexually aggressive attitudes, reported likelihood of rape/forced sex acts, sex callousness, and sexually aggressive behavior.

Sexually Aggressive Attitudes. The attitude measures consisted of Burt's (1980) Rape Myth Acceptance scale, and Adversarial Sex Beliefs scale. As well, the five items from Burt's Acceptance of Interpersonal Violence scale that referred specifically to violence against women were used. These scales have previously been shown to predict many other rape-related variables (see Check & Malamuth, 1983, 1985; Malamuth, 1981b; Malamuth & Donnerstein, 1982, for reviews).

Reported Likelihood of Rape/Forced Sex Acts. In order to assess the effects of the videotapes on subjects' self-predictions that they might rape, Malamuth's (1981b) Likelihood of Raping rating was employed. Subjects were asked to indicate how likely they would be to commit rape (if they could be assured that they would not be caught and punished) on a 5-point scale, ranging from 1 = "not at all likely" to 5 = "very likely." On a similar scale, subjects were requested to indicate how likely they would be to force a female to do something sexual she really didn't want to do. These measures were also used later to create secondary measures of likelihood of rape/forced sex, by calculating the percentage of respondents who indicated any likelihood at all that they might rape/force (i.e., those who indicate a 2 or higher on the 5-point scale), as compared to those indicating no likelihood.

Sex Callousness. Sex callousness toward women was measured using Form A of Mosher's (1971b) 15-item Sex Callousness scale. Mosher (1971a) and Zillmann and Bryant (1984) have also used the Sex Callousness scale to measure the effects of exposure to pornography.

Sexually Aggressive Behavior. Sexually aggressive behavior was measured using Koss and Oros' (1982) Sexual Experiences Survey, a 10-item instrument designed to measure self-reported sexual aggression. This instrument assesses a range of forced sexual behaviors, ranging from coercing a woman to engage in sexual intercourse by "threatening to end the relationship otherwise," to

actually holding a woman down and physically forcing her to have intercourse. Koss and Leonard (1984) report that this measure is predictive of a number of rape-supportive attitudes and beliefs, and Henry, Check, & Smith (1984) found that convicted rapists scored three times as high on this measure as did a control group of violent nonsex offenders.

Subject Recruitment

Subjects were recruited through newspaper advertisements placed in York University and local Toronto newspapers, a procedure which is frequently adopted in sex related studies (see Barker & Perlman, 1975). Each subject was mailed an informed consent form and then contacted again at a later date to arrange his specific appointment(s) to participate in the research. Subjects were told when they arrived at the research setting that their responses would be used by the Government of Canada to form policy on the issue of pornography.

Procedure: Videotape Exposure Conditions

Subjects in the videotape exposure conditions participated in three videotape exposure sessions (in groups of up to 45 individuals), over a period of about 6 days. At a fourth session (4–5 days later), subjects completed the questionnaire containing the various dependent measures. All subjects viewed the three tapes in the same order.

At the first exposure session, subjects completed the prescreening questionnaire, and were then given the MAACL affect measure (for use in other research), and shown the first session videotape. Following the tape, the subjects were then given the MAACL again, and asked to evaluate the videotape and to indicate their perceptions (again, for use in other research). This evaluation exercise provided a cover story, designed to distract subjects from the main purpose of the research. Subjects were instructed *not* to put their name anywhere on any of the questionnaires. In order to match up the prescreening questionnaires with the later session questionnaires, subjects were instructed to put personal code numbers on their questionnaires. The procedure for the second and third sessions was identical to that of the first session, except that no prescreening questionnaire was administered.

At the fourth session, subjects completed the questionnaire containing the various dependent measures. They were then given a written debriefing handout and presented with a 20-minute debriefing videotape designed to reduce rape myths and counteract the effects of exposure to the pornography (see Check & Malamuth, 1984, in press; Donnerstein & Berkowitz, 1981; Donnerstein & Linz, 1984; Malamuth & Check, 1984; for further details regarding these types of debriefing procedures.) Subjects were then paid $40 each and dismissed.

Procedure: No-Exposure Condition

Subjects in the no-exposure condition participated in only one session. They completed the dependent measure questionnaire immediately after completing the prescreening questionnaire. They were then given a videotape to view and evaluate (for use in other research), followed by the written debriefing. They were then paid $10 each, and dismissed.

RESEARCH FINDINGS

Sample Characteristics

The attrition rate for this study was about 14%, and this attrition rate was approximately equally distributed across the three experimental videotape exposure conditions.[2] The men ranged in age from 18 to 78 years, with a mean of 32.1 years. The students were younger than the nonstudents (*M*s = 23.3 and 35.5 years, respectively, $p < .001$). Half of the men were single, 39% were married, and 5% were divorced. Of the total sample, 84% were Caucasian, 8% were Oriental, and 4% were Black. In terms of education, 7% had completed only Grade 9, 20% had completed only high school, 16% reported trade school or community college training, 28% reported some university training, 20% had bachelor's degrees, and 9% had at least one graduate degree. The men reported a wide diversity of occupations, ranging from physicians to truck drivers. As a preliminary analysis, the four experimental groups were com-

[2]It would have been useful and interesting to compare subjects who left the experiment with those who came to all four of their exposure sessions on the various dependent variables, but unfortunately these subjects of course did not complete the postexposure questionnaire assessing the various dependent measures. However, it should be noted that the lack of *differential* loss of respondents across the three experimental pornography exposure groups suggests that subject attrition did not create a serious threat to the internal validity of the study.

pared on these various sociodemographic characteristics in order to check on the effectiveness of the random assignment procedure. These analyses yielded no significant differences, thus suggesting that the random assignment procedure was effective.

Psychoticism Levels, Pornography Consumption Habits

Psychoticism scores ranged from a low of 0 to a high of 8 on the 20-point scale, with a mean score of 1.5. The men reported viewing sexually explicit videos/films an average of 1.2 times per month, with 55% of the sample reporting that they viewed such materials at least once per month. The student sample reported less frequent viewing than the nonstudent sample (*M*s = 0.76 and 1.34 times per month, respectively, $p < .015$).

Overview of the Main Analyses

The overall design of the experiment was a 2 (Student Status) × 4 (Videotape Exposure) between groups factorial. However, it was also of interest to determine the relationship between psychoticism and the various dependent measures, as well as the role that psychoticism might play in mediating the effects of the videotape exposure variable. Therefore, subjects who scored 1 or less on the psychoticism scale were classified as *low P* scorers ($n = 250$, $M = .50$), while those who scored higher than 1 on the psychoticism measure were classified as *high P* scorers ($n = 186$, $M = 2.9$). This two-category variable was then included as an additional independent variable in the analyses, and the various dependent variables were analysed using 2 (Psychoticism) × 2 (Student Status) × 4 (Videotape Exposure) analyses of variance.

Evaluations and Perceptions of the Videotapes

As mentioned previously, subjects indicated their evaluations and perceptions of the videos at each of the three exposure sessions, for use in other research. These data are reported in detail elsewhere (Check & Guloien, in preparation), but it is instructive to note here that subjects' ratings generally conformed quite well with our classification of the three types of videos. The sexually violent videos were rated as the least educational, realistic, and affectionate, the most obscene, the most offensive, the most aggressive, and the most degrading. In contrast, the erotica was rated as the most educational, realistic, and affectionate, the least obscene, the least offensive, the least aggressive and the least degrading. As expected, the nonviolent dehumanizing videos were rated in between the sexually violent and the erotica tapes on most of the variables. Finally, it was interesting to note that all three types of material were rated as equally sexually arousing, exciting, stimulating, and boring (see Check & Guloien, in preparation).

Postexposure Sexually Aggressive Attitudes and Behavior

Because the psychoticism and student status variables each had only two levels (*high P* scorers versus *low P* scorers, and students versus nonstudents), the omnibus *F*-test from the analysis of variance was used to test differences in aggressive attitudes and behavior due to psychoticism and student status. The analysis of the videotape exposure variable, however, was conducted using three planned comparisons (Kirk, 1982): (a) a comparison of the sexually violent pornography exposure condition with the no-exposure control condition, (b) a comparison of the nonviolent dehumanizing pornography condition with the no-exposure condition, and (c) a comparison of the nonviolent erotica condition with the no-exposure condition. These comparisons were tested using the a priori comparison procedures recommended by Kirk (1982).

Differences as a Function of Psychoticism

The analyses of variance yielded a number of significant differences between *high P* scorers and *low P* scorers in terms of rape myth acceptance ($p < .011$), reported likelihood of raping ($p < .01$), and reported likelihood of forcing women into unwanted sex acts ($p < .045$). Calculations of the percentage of men who reported at least some likelihood of rape and forced sex acts (i.e., a 2 or higher on the 5-point scale) revealed significant differences between *high P* scorers and *low P* scorers on both reported likelihood of rape ($p < .036$), and forcing women into unwanted sex acts ($p < .035$). Finally, significant differences between *high P* scorers and *low P* scorers were also found on the measure of sexually aggressive behavior ($p < .002$).

An examination of the means for these variables revealed that *high P* scorers, relative to *low P* scorers were more accepting of rape myths (*M*s = 44.1 and 40.9, respectively), reported a greater

likelihood of raping (*M*s = 1.44 and 1.22, respectively, percentage with "some" likelihood = 20.7% and 12.4%, respectively), and forcing women into unwanted sex acts (*M*s = 1.71 and 1.49, respectively, percentage with "some" likelihood = 38.8% and 27.9%, respectively), and reported actually committing more sexually aggressive acts (*M*s = 1.77 and 0.79, respectively). These results are quite consistent with Barnes, Malamuth and Check's (1984a, 1984b) findings that psychoticism was associated with sexually aggressive attitudes and with sexual arousal to rape.

Differences as a Function of Student Status

The analyses of variance revealed differences between the student and the nonstudent samples, in terms of reported likelihood of rape ($p < .042$), reported likelihood of forcing women into unwanted sex acts ($p < .042$), and sexually aggressive behavior ($p < .001$). The students reported a greater likelihood of raping than did the nonstudents (*M*s = 1.42 and 1.24, respectively), and also reported a greater likelihood of forcing women into unwanted sex acts than did the nonstudents (*M*s = 1.71 and 1.49, respectively). However, the students reported actually committing fewer acts of sexual aggression on the Koss and Oros (1982) scale than did the nonstudents (*M*s = 0.77 and 1.30, respectively).

Effects of Videotape Exposure

Statistical tests of the planned comparisons revealed that exposure to sexually violent and to dehumanizing pornography had effects on subjects' self-reported likelihood of raping and forcing women into unwanted sex acts. However, no significant effects of exposure to erotica were observed. These effects will be discussed separately for each of the three videotape exposure conditions.

Exposure to Sexually Violent Pornography. The analyses revealed significant differences between subjects exposed to sexually violent pornography and subjects in the no-exposure condition, both in terms of reported likelihood of rape ($p < .022$), and the percentage of subjects who indicated at least some likelihood (a 2 or higher on the 5-point scale) on this measure ($p < .049$). As can be seen from the first and fourth columns of Table 6.1, subjects who had been exposed to the sexually violent pornography reported a greater likelihood of raping than subjects in the no-exposure condition. In terms of the percentage of men who indicated "some" likelihood of raping (i.e., a 2 or higher on the 5-point scale), twice as many men indicated at least some likelihood of raping after

exposure to sexually violent pornography than after no such exposure (i.e., 20.5% versus 9.6%, respectively).

Exposure to Nonviolent, Dehumanizing Pornography. The analyses also yielded significant differences between subjects exposed to the nonviolent, dehumanizing pornography and subjects in the no-exposure condition, in terms of reported likelihood of rape ($p < .013$), the percentage of men who indicated some likelihood of rape ($p < .043$), and reported likelihood of forcing a woman into unwanted sex acts ($p < .05$). The difference in terms of the percentage of men who indicated some likelihood of forcing women into unwanted sex acts, however, did not quite reach acceptable levels of statistical significance ($p < .083$). As can be seen from the second and fourth columns of Table 6.1, subjects who had been exposed to the nonviolent, dehumanizing pornography reported a greater likelihood of raping and forcing women into unwanted sex acts than subjects in the no-exposure condition. Further, more than twice as many men indicated at least some likelihood of raping after exposure to nonviolent, dehumanizing pornography than after no such exposure (i.e., 20.4% versus 9.6%, respectively).

Exposure to Nonviolent Erotica. The analyses indicated that there were no effects, positive or negative, of exposure to erotica.

TABLE 6.1
Pornography Exposure Effects: Main Effects

	Exposure Condition			
Dependent Variable:	*Violent Pornography (n = 100) M*	*Dehumanizing Pornography (n = 109) M*	*Erotica (n = 108) M*	*No Exposure (n = 115) M*
Reported Likelihood of Rape:				
Scale Score:	1.43_a	1.44_a	$1.31_{a,b}$	1.14_b
Percentage with "Some" Likelihood:	$20.5\%_a$	$20.4\%_a$	$15.7\%_{a,b}$	$9.6\%_b$
Reported Likelihood of Forced Sex Acts:				
Scale Score:	$1.64_{a,b}$	1.76_a	$1.56_{a,b}$	1.47_b
Percentage with "Some" Likelihood:	$33.7\%_a$	$39.1\%_a$	$33.6\%_a$	$26.9\%_a$

Note: Higher numbers refer to greater (e.g., likelihood of rape). Within each row, means with different subscripts differ at the .05 level of significance.

That is, there were no significant differences on any of the dependent measures between subjects exposed to nonviolent erotica and subjects in the no-exposure condition (see columns 3 and 4 of Table 6.1.)

Two-Way Interactions: The Mediating Role of Psychoticism

As noted earlier, it was of interest to determine the mediating role of the psychoticism and the student status variables on the effects of the videotape exposure variable. To this end, interaction effects tests were conducted. That is, each of the three planned comparisons among the videotape exposure conditions (sexual violence versus no exposure, nonviolent, dehumanizing versus no exposure, and erotica versus no exposure) was tested for its interaction with the psychoticism and the student status variables. As detailed below, these tests revealed a number of interactions between the videotape exposure variable and the psychoticism and student status variables. In general, these interactions indicated that *high P* scorers (especially *high P* scorers who were students) were more likely to be affected by exposure to the violent and dehumanizing pornography than were *low P* scorers. However, it should be emphasized that in no case was there any indication that any particular group was affected by exposure to the nonviolent, erotica materials.

Interactions with Exposure to Sexually Violent Pornography. There were two-way interactions between psychoticism and the comparison of the sexually violent pornography exposure group versus the no-exposure group, on both self-reported likelihood of rape ($p < .018$), and self-reported likelihood of forcing a woman into unwanted sex acts ($p < .027$). Follow-up comparisons revealed that these interactions occurred because the effects of exposure to sexually violent pornography were particularly strong for *high P* scorers. As can be seen from columns 1 and 4 of Table 6.2, the comparisons between the sexually violent pornography exposure condition and the no-exposure condition were in fact significant only for *high P* scorers. This was true for both self-reported likelihood of raping $p < .001$), and self-reported likelihood of forcing a woman into unwanted sex acts ($p < .015$).

Interactions with Exposure to Nonviolent Dehumanizing Pornography. There were also two–way interactions between psychoticism and the comparison of the nonviolent, dehumanizing pornography exposure group versus the no-exposure group. These

TABLE 6.2
Pornography Exposure Effects: High and Low P Scorers

	Exposure Condition			
Dependent Variable:	*Violent Pornography M*	*Dehumanizing Pornography M*	*"Erotica" M*	*No Exposure M*
	High P Scorers			
	(n = 42)	*(n = 54)*	*(n =41)*	*(n = 47)*
Reported Likelihood of Rape:	1.69_a	1.60_a	$1.35_{a,b}$	1.12_b
Reported Likelihood of Forced Sex Acts:	1.88_a	1.92_a	$1.67_{a,b}$	1.38_b
	Low P Scorers			
	(n = 58)	*(n = 55)*	*(n = 67)*	*(n = 68)*
Reported Likelihood of Rape:	1.16_a	1.27_a	1.27_a	1.17_a
Reported Likelihood of Forced Sex Acts:	1.38_a	1.59_a	1.45_a	1.56_a

Note: Higher numbers refer to greater (e.g., likelihood of rape). Within each row, means with different subscripts differ at the .05 level of significance.

interactions, however, did not quite reach acceptable levels of significance, for either self-reported likelihood of rape ($p < .11$), or self-reported likelihood of forcing a woman into unwanted sex acts ($p < .085$). Nonetheless, follow-up comparisons revealed that the effects of exposure to the nonviolent, dehumanizing pornography were again particularly strong for *high P* scorers. As can be seen from columns 2 and 4 of Table 6.2, the comparisons between the nonviolent, dehumanizing pornography exposure condition and the no-exposure condition were again significant only for *high P* scorers. This was true for both self-reported likelihood of raping ($p < .002$), and self-reported likelihood of forcing a woman into unwanted sex acts ($p < .006$).

Interactions with Exposure to Erotica. There were no significant two-way interactions between psychoticism and the comparison of the erotica exposure group versus the no-exposure group.

Three-Way Interactions

Interactions with Exposure to Sexually Violent Pornography. There were a number of three-way interactions between psychoticism, student status, and the comparison of the sexually vio-

lent pornography exposure group versus the no-exposure group. These interactions were found for self-reported likelihood of rape ($p < .01$), the percentage of men who indicated some likelihood of rape ($p < .016$), and self-reported likelihood of forcing a woman into unwanted sex acts ($p < .015$). These interactions occurred because the effects of exposure to the sexually violent pornography were greatest for *high P* scorers who were students. The comparisons between *high P* scorers in the sexually violent pornography exposure condition and *high P* scorers in the no-exposure condition were in fact significant only for the students. This was true for both self-reported likelihood of raping (*M*s = 2.10 and 1.00 respectively, $p < .001$), the percentage of men who indicated some likelihood of raping (40% and 0%, respectively, $p < .007$), and self-reported likelihood of forcing a woman into unwanted sex acts (*M*s = 2.30 and 1.23, respectively, $p < .009$).

Interactions with Exposure to Nonviolent, Dehumanizing Pornography. There were three-way interactions between psychoticism, student status, and the comparison of the nonviolent, dehumanizing pornography exposure group versus the no-exposure group in terms of self-reported likelihood of rape ($p < .048$), and the percentage of men who indicated some likelihood of rape ($p < .031$). These interactions occurred because the effects of exposure to the nonviolent, dehumanizing pornography were greatest for *high P* scorers who were students. The comparisons between *high P* scorers in the nonviolent, dehumanizing pornography exposure condition and *high P* scorers in the no-exposure condition were in fact significant only for the students. This was true for self-reported likelihood of raping (*M*s = 1.95 and 1.00, respectively, $p < .001$), the percentage of men who indicated some likelihood of raping (36.8% and 0%, respectively, $p < .004$), and self-reported likelihood of forcing a woman into unwanted sex acts (*M*s = 2.16 and 1.23, respectively, $p < .008$).

Interactions with Exposure to Erotica. There were no significant three-way interactions between psychoticism, student status, and the comparison of the erotica exposure group versus the no-exposure control group.

Supplementary Analyses: Pornography Consumption Habits

As mentioned earlier, it was also of interest in this study to examine the relationship between subjects' pornography consumption habits and the various postexposure measures, as well as the role that

habitual pornography consumption might play in mediating the effects of exposure to pornography. To this end, subjects were divided into high-frequency pornography consumers (once per month or more often, $n = 241$, $M = 2.0$ times per month), and low-frequency pornography consumers (less than once per month, $n = 195$, $M = .08$ times per month). The various postexposure measures of sexually aggressive attitudes and behavior were then re-analysed using 2(Pornography Consumption) × 2(Student Status) × 4(Videotape Exposure) analyses of variance.

These analyses yielded essentially the same results with respect to the main effects of videotape exposure and student status as did the previous analyses, and therefore they are not discussed again. However, there were also a number of interesting main and interaction effects involving the pornography consumption independent variable.

Differences as a Function of Habitual Pornography Consumption. There were significant differences between high-frequency pornography consumers and low-frequency consumers on rape myth acceptance ($p < .001$), acceptance of violence against women ($p < .046$), adversarial sex beliefs ($p < .015$), reported likelihood of rape ($p < .001$), the percentage of men indicating some likelihood of rape ($p < .0005$), reported likelihood of forcing a woman into unwanted sex acts ($p < .020$), and sex callousness ($p < .0005$). As reported in Table 6.3, high-frequency pornography consumers were more accepting of rape myths and violence against women, more likely to endorse adversarial sex beliefs, reported a greater likelihood of raping and forcing women into unwanted sex acts, and were more sexually calloused than low-frequency pornography consumers. Thus, pornography consumption was associated with a number of antisocial attitudes and inclinations regarding sexual aggression. As detailed below, the sexual *behavior* of high-frequency pornography consumers was also more likely to be affected by exposure to pornography.

Two-Way Interactions: The Mediating Role of Pornography Consumption Habits. There were significant two-way interactions involving the pornography consumption variable and the comparison of the nonviolent, dehumanizing exposure condition versus the no-exposure condition, on self-reported likelihood of raping ($p < .046$), and sexually aggressive behavior ($p < .042$). Note, however, that on three other dependent variables this interaction almost attained acceptable levels of statistical significance. These variables were rape myth acceptance ($p < .083$), adversarial

TABLE 6.3
Sexually Aggressive Attitudes and Behavior as a Function of Habitual Pornography Consumption

	Pornography Consumption Classification	
Dependent Variable:	*Low Frequency Consumers M*	*High Frequency Consumers M*
Rape Myth Acceptance:	39.46_a(194)	44.49_b(240)
Acceptance of Violence Against Women:	12.52_a(194)	13.71_b(240)
Adversarial Sex Beliefs:	27.93_a(194)	30.32_b(240)
Reported Likelihood of Rape:		
—Scale Score:	1.18_a(193)	1.46_b(239)
—Percentage with "Some" Likelihood:	$8.9\%_a$(193)	$22.8\%_b$(239)
Reported Likelihood of Forced Sex Acts:	1.46_a(193)	1.71_b(239)
Sex Callousness:	32.69_a(195)	38.41_b(241)

Note: Higher numbers refer to greater (e.g., rape myth acceptance or higher likelihood of rape). Within each row, means with different subscripts differ at $p < .05$. The numbers in parentheses following each mean are cell sizes. The cell sizes differ slightly across the various dependent variables, because some subjects omitted a few items when completing the questionnaires.

sex beliefs ($p < .077$), and sex callousness ($p < .084$). Therefore, follow-up comparisons were conducted for all of these variables.

Follow-up comparisons revealed that the differences between the nonviolent, dehumanizing pornography exposure condition and the no-exposure condition were most pronounced for high-frequency pornography consumers. Tests of significance revealed that these differences were only significant for high frequency viewers on reported likelihood of raping ($p < .0001$), sex callousness ($p < .008$), and sexually aggressive behavior ($p < .013$). As can be seen from Table 6.4, high-frequency consumers who had been exposed to the nonviolent, dehumanizing pornography subsequently reported a greater likelihood of raping, were more sexually callous, and were more sexually aggressive than high-frequency pornography consumers in the no-exposure condition. This was not the case for low-frequency consumers, who were unaffected by such exposure.

Finally, there were no significant two-way interactions between the pornography consumption variable and exposure to nonviolent erotica, nor were there any such interactions involving the pornography consumption variable and exposure to the sexually violent pornography.

Summary of the Major Findings

The results of this study indicated that, consistent with expectation, exposure to both sexually violent pornography and to nonviolent, dehumanizing pornography fostered the perception in subjects' minds that they might rape and force women into unwanted sex acts. More than twice as many men who had been exposed to sexually violent or to nonviolent dehumanizing pornography reported that there was at least some likelihood that they would rape, compared to the men in the no-exposure condition. Moreover, interaction tests revealed that these effects occurred primarily for *high P* scorers, particularly *high P* scorers who were students. *High P* scorers in general were also found to be more accepting of rape myths, have higher reported likelihoods of raping and forcing women into unwanted sex acts, and reported actually committing more acts of sexual aggression than did *low P* scorers.

A number of interesting findings also emerged when subjects' pornography viewing habits were examined. First, subjects who viewed sexually explicit videos or films at least once per month (relative to those who rarely viewed such materials) were more accepting of rape myths and violence against women, more likely to endorse adversarial sex beliefs, more likely to report that they would rape and force women into unwanted sex acts, and were

TABLE 6.4
Effects of Exposure to Nonviolent Dehumanizing Pornography: High-Frequency Pornography Consumers

	Exposure Condition	
Dependent Variable:	*Nonviolent Dehumanizing Pornography M*	*No Exposure M*
Reported Likelihood of Rape:	1.76_a(56)	1.17_b(70)
Sex Callousness:	43.07_a(57)	36.38_b(70)
Sexually Aggressive Behavior:	1.48_a(57)	0.85_b(70)

Note: Higher numbers refer to greater (e.g., rape myth acceptance or higher likelihood of rape). Within each row, means with different subscripts differ at $p < .05$. The numbers in parentheses following each means are the cell sizes. The cell sizes differ slightly across the various dependent variables, due to the fact that some subjects omitted a few items when completing the questionnaires.

more sexually callous. Pornography consumption habits also mediated the effects of exposure to nonviolent, dehumanizing pornography. In particular, high-frequency pornography consumers who were exposed to the nonviolent, dehumanizing pornography (relative to those in the no-exposure condition) were particularly likely to report that they might rape, were more sexually callous, and reported engaging in more acts of sexual aggression. These effects were not apparent for men who reported a very low frequency of habitual pornography consumption.

Perhaps the most important finding in this study was the fact that, as expected, exposure to the nonviolent, erotica materials did not have any demonstrated antisocial impact on any of the dependent variables, nor did exposure to erotica interact with any of the other independent variables. This was in contrast to sexually violent and dehumanizing pornography, where such effects were found.

RESEARCH IMPLICATIONS

The major hypothesis of this research was that both sexually violent pornography and nonviolent but nonetheless dehumanizing pornography would have antisocial effects, whereas nonviolent erotica would not have any antisocial effects, and might even have positive effects. The results of this study provide some support for the hypothesis that erotica have no antisocial impact, and, in addition, suggest that there are a number of important mediators of the effects of exposure to sexually violent and/or dehumanizing pornography. In particular, individuals with at least some minimal levels of psychoticism (who are already somewhat sexually aggressive in their attitudes and behavior) are more likely to be affected by exposure to pornography, particularly in the case of students. This finding is consistent with the principle of reciprocal determinism as applied in Check and Malamuth's (1986) social learning model of the effects of exposure to pornography, a model which suggests that those who are most likely to "learn" sexual abuse from violent and dehumanizing pornography are those who (a) already possess sexually aggressive tendencies, and/or (b) are younger, less sexually experienced,[3] and still in a "learning mode," as is the case with students.

[3]Data collected on Bentler's (1968) measure of sexual experience indicated that students were less sexually experienced than nonstudents, $t(430) = 5.78$, $p < .0001$ (means = 16.61 and 19.25, respectively, on a 0–21 scale).

Habitual pornography consumption was also associated with a number of antisocial beliefs and self-reported inclinations regarding sexual aggression. Two possible explanations for this finding are that (a) high frequency pornography consumers are more antisocial as a result of consuming pornography, or (b) they may consume pornography because they are more antisocial individuals to begin with. It is likely that both processes operate, and, in fact, the present data suggest that those individuals who consume pornography on a regular basis are the most likely to be affected by exposure to nonviolent, dehumanizing pornography. It should be kept in mind, however, that the effects of exposure to sexually *violent* pornography were the same for both high- and low-frequency pornography consumers.

Of particular interest in this study was the fact that the effects of exposure were strongest and most pervasive in the case of exposure to nonviolent dehumanizing pornography, the type of material that may in fact be most prevalent in mainstream commercial entertainment videos. (In selecting the materials for this investigation, it was necessary to screen a large number of videos. During this screening process it became readily apparent that nonviolent, dehumanizing pornography was the most frequent type of material we encountered, with sexually violent pornography and erotica being much less common.)

In contrast to the violent and dehumanizing pornography, the nonviolent erotica materials used in this study were not found to have any effects on any of the dependent variables, suggesting that, as hypothesized, there is apparently no need for concern that such materials may have negative effects (at least with respect to the dependent variables measured here). These findings are again consistent with the assumption that it is important to distinguish different *types* of sexually explicit materials, because only some of these materials may have negative effects.

LIMITATIONS OF THE PRESENT STUDY

As is the case in any study that purports to investigate complex human behavior, there are some limitations to the current research that the reader should be aware of. First, it might be argued by some that the men who participated in this study were not a random sample of the population of Canadian males over the age of 18, although our sample was probably more representative than the samples of college students that are almost universally used in this type of research. However, one might speculate that the type

of men who volunteer for such research are men who are most likely to be actually exposed to pornography, and to potentially be affected by it. Thus the fact that over half of our subjects were frequent pornography consumers actually enhances the generalizability of our results, as it would seem rather silly to study the effects of pornography on men who are never likely to actually view such materials.

A second potential limitation of this study stems from the fact that the no-exposure condition which was used as the comparison group cannot, strictly speaking, be considered a perfect "control group." In experimental design terms (see e.g., Kirk, 1982), a control group is a group that is treated *exactly* the same as the experimental groups, except for the experimental manipulation of interest (in this case, exposure to pornography). In the present study, the no-exposure group differed from the videotape exposure groups on other dimensions as well. For example, the videotape exposure groups came for a total of four experimental sessions, whereas the no-exposure group came for only one session. As well, the videotape exposure groups completed questionnaires on four separate occasions, whereas the no-exposure group completed a questionnaire on only one occasion. It should be noted, however, that we deliberately chose this procedure in an attempt to enhance the internal validity of the experiment. One of the serious problems with studies that repeatedly expose a control group to nonsexual films (e.g., National Geographic films) relates to subject attrition. Subjects who drop out of such a (neutral film) control condition (most likely because they become bored with watching the nonexplicit material) are potentially very different from subjects who drop out of an experimental condition involving the repeated viewing of sexual materials. In the latter case, it is possible that subjects who drop out are those who are most offended by sexually explicit materials, and least interested in them. This would then artifactually detract from the representativeness of the remaining subjects in the experimental conditions, and may result in those who remain being simply the most sexually aggressive subjects. (Recall that in the present investigation it was the frequent pornography consumers who scored highest on the various measures of sexually aggressive attitudes and behavior.) It may also be the case that frequent—and more sexually aggressive—pornography consumers will be more likely to refuse to participate in a study if they are told that they will not be watching sexually explicit films, a situation that would result in sexually aggressive men being *under*-represented in the control group. Thus the researcher who is searching for an appropriate procedure for his or her control group is faced with a dilemma. On the one hand, a no-exposure control group may confound videotape content with exposure per se, but on the other hand a neutral film control group may confound videotape content with reasons for subject attrition. It was our estimation that it would be wiser to have all of our subjects arrive at the research setting expecting to view pornography, thus minimizing any preexisting differences between the videotape exposure groups and the no-exposure control group.

The aforementioned limitations considered, it would be unwise for the researcher to recommend broad policy changes on the basis of just one study. This is precisely why it is important to consider all of the research discussed in this chapter, rather than the present results alone. Perhaps the most important implication of this study, therefore, stems from the fact that it ties together and supports what a number of other studies have already directly or indirectly shown, that is, that sexually violent and/or dehumanizing pornography can have certain antisocial effects, whereas erotica seem not to have any antisocial effects.

POSTSCRIPT: SUBSEQUENT STUDIES

Following the completion of this study in early 1984, a number of other studies have been conducted on the effects of exposure to nonviolent sexually explicit materials, studies that have led to a great deal of theoretical confusion as well as conflicting research results (see Weaver, 1987, for a detailed review.) Much of this confusion, however, seems to stem from researchers' failure to distinguish nonviolent, *dehumanizing* materials from nonviolent *erotica*. (To our knowledge, there has since been only one other study, by Senn, 1985, which has even attempted to separate out these two types of materials, and it is interesting to note that Senn's findings with female subjects are largely consistent with the results of our investigation using males.) Typically, for example, researchers are now using entire feature-length, commercially available, sexually explicit videos (e.g., Linz, 1985), which as we noted earlier are likely to contain *both* nonviolent, dehumanizing content and nonviolent erotica in the same videotape, even if no violent scenes are present. This results in a confound, since there seems to be both strong theoretical reasons and now empirical support for the need to distinguish these two types of themes in order to fully understand their effects. It is hoped that this study encourages future researchers to make such a distinction when they study the effects of nonviolent materials.

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7

Pornography and Sex Offenders

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This chapter is concerned with the exposure and responsiveness to pornography amongst men who commit sexual offenses. I further attempt to focus on only those offenders (hereafter called *rapists*) who sexually attack adult females or offenders (hereafter called *child molesters* or *pedophiles*) who sexually attack children. Because it is rare that females are identified as having committed these crimes, no consideration is given to the use of pornographic materials by females. The issues considered concern whether or not these men are differentially aroused by different types of pornography, whether or not they experience a greater degree of exposure to pornography than nondeviants, and whether or not such exposure appears to play a role in the commission of their crimes. As to the role of pornography in the etiology of sexual deviance, little more than correlational statements can be made, but I attempt to show how pornography consumption might enter into the complexity of factors that shape the behavior and thinking of men who as adults display deviant sexual behaviors.

In limiting consideration primarily to rapists and child molesters, I have necessarily excluded other kinds of paraphiliacs including other sexual offenders, and this may be considered by some to be a deficiency. There are several reasons for adopting this tactic,